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Comparison of a formal reading curriculum and individualized reading materials for a student with significant disabilities

Marissa McCallum

Action Research

Submitted in Partial Fulfillment of the

Requirements for the Degree of

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This action research
has been approved for
Cardinal Stritch University by

Sr. Gabrielle Kowalski

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Introduction

Does the Early Literacy Skills Builder (ELSB) curriculum teach students with significant disabilities sight words and reading comprehension better than teacher created instruction? This question was important to my situation and to any teachers who are looking for information relating to educating students with significant disabilities. Before accessing the Early Literacy Skills Builder curriculum (Browder, Gibbs, Ahlgrim-Delzell, Courtade, & Lee, 2007), I created my students' instruction based on my knowledge, experiences, and limited research.

Purpose of the Study

The purpose of the study was to determine whether a student with significant disabilities learned better with a formal, research-based curriculum that is uniform or instructional material that is individualized. There is research conducted by the authors of the curriculum (Browder, Ahlgrim-Delzell, Courtade, Gibbs, & Flowers, 2008) available focusing on why the Early Literacy Skills Builder curriculum is highly effective; however, there was no information that compared it to instruction created and tailored to each student's interests, experiences, and vocabulary. Even though students with significant disabilities do not make up a large group of students, research in this area could benefit teachers who may be wondering what and how to educate their students.

Scope and Limitations

There were limits to this study. The participant was one special education student, age nine, in an intensive services program in one elementary school in a Milwaukee suburb (Wauwatosa, Wisconsin). The participant was identified with autism and a cognitive disability. He was Caucasian and from a middle class family. To ensure confidentiality, instead of using the

participant's name he was referred to as student R. The study was limited due to the fact that there was a single participant with significant educational, communicational, behavioral, and sensory needs. These factors lead to research that was narrow and focused on only a limited number of topics.

Definitions

The following definitions ensure common understanding of terms.

Receptive- (in language learning) pertaining to the language skills of listening and reading (http://dictionary.reference.com/browse/receptive); receptive language involves the comprehension of spoken language (Kaufman Children's Center http://www.kidspeech.com/index.php?option=com_content&task=view&id=54&Itemid=512); the ability to understand and comprehend what is being said or read (http://kindergarten.com/what-our-applications-offer/receptive-identification-for-early-learners/)

Sight Word- common words that a reader should recognize on sight, instantly, and automatically in order to develop into an efficient and smooth reader; also referred to as "high-frequency words." (http://www.fishforwords.com/sight-words-definition.php).

Significant Disability- students whose instruction is aligned to the Extended Grade Band Standards, and who takes the Wisconsin Alternate Assessment. (DPI www.dpi.wi.gov/sped/assmt-extended.html)

Summary

This study was designed to ascertain which teaching strategies result in optimal literacy development for a student with significant disabilities. Since the research in this area is limited, this study provided information that could be beneficial to other teachers who work with students that have significant disabilities. Comparing a formal program like Early Literacy Skills Builder

with individualized reading material addressed whether a uniform curriculum can better meet the needs of a student with significant disabilities.

Chapter 2

Review of Literature

There is limited literature readily available focusing on the topic of curriculum and literacy for students with significant disabilities. Much of the research looked at inclusion or the Wisconsin Alternate Assessment. The studies reviewed addressed the topics of what should be taught to students with significant disabilities, how it should be taught, and if any effective curriculum exists.

Curriculum for students with significant disabilities. What should be taught to students with significant disabilities has been debated for many years. Should these students be taught from a functional curriculum or from a modified general education curriculum? The idea of combining those two concepts has also been raised. Most recently, there has been an increased move towards inclusive education, where students with significant disabilities are being taught in the general education classroom. This further raises the question of what should be taught and if an appropriate curriculum exists.

According to Browder, Wakeman, Spooner, Ahlgrim-Delzell, and Algozzine (2006) there hasn't been enough importance placed on reading instruction for students with moderate to severe cognitive disabilities. Even though functional skills are important they should not be the only focus; students with significant disabilities need intensive instruction in order to learn to read (Browder et al., 2006). The article mentions reading instruction has concentrated on sight word development because it was thought to benefit students' independence. However, many words taught did not prove to have a functional use. Hadadian and Weikle (2004) outline a lack of literacy skills with academic goals for students with serious intellectual disabilities. "The standard curriculum for students with more serious intellectual disabilities has been organized

into such categories as gross and fine motor development, self-help skills, language and communication, recreational, social, and leisure skills, and functional academic skills" (Hadadian & Weikle, 2004, p. 653). Other factors are reading expectations continue to be low, parents having literacy development lower on their priority list, and fewer literacy opportunities. The article encourages figuring out ways to support families, teaching parents what they can do early on to promote literacy development.

"Functional skills, which once were widely accepted as the basis for curriculum development, have received limited attention as the field has moved to a more inclusive service delivery model" (Dymond & Orelove, 2001, p. 111). While there has been a large amount of research emphasizing the social benefits of inclusion, there hasn't been the same importance given to research on the amount of academic and functional progress mainstreamed students with significant disabilities are making. The article recommends that researchers focus on academic, functional, and social skills. A reminder to pay attention to the future goals for these students and what skills will they need to achieve those goals.

Collins, Evans, Creech-Galloway, Karl, and Miller (2007) completed a study that compared functional and core content sight words across three environments: special education classroom, general education classroom, and embedded in the general education classroom instruction. In the first two environments students learned sight words using systematic instruction, where in the third environment the students were exposed to the sight words in a more natural way such as through teacher lecture or worksheet. The study found that the students reached criterion for both functional and core content sight words regardless of instructional setting. However, the reached criterion mean for functional sight words was one session fewer than the core content sight words.

Dymond and Orelove (2001) discussed whether students with significant disabilities participating in the same activities as their peers would be able to meet their specific learning needs and move towards proficiency in skill areas. There has been such a focus on inclusion lately, where it seems as though inclusion is the curriculum. It doesn't matter if general education classroom curriculum moves the students forward in their academic or functional skills. "Is an academic curriculum focus chosen for a child because it assists with their inclusion in the general education classroom or because it meets their individual needs for learning (Dymond & Orelove, 2001, p. 114-115)? Much of the time, it is possible to modify the general education curriculum, but does that make academics functional and meaningful? On the other hand, if the students are in general education classes doing work that is totally different from their peers then they are physically present, but not a part of the class. Dymond and Orelove (2001) did acknowledge inclusion does provide students with significant disabilities the opportunity to learn social and communication skills in the actual environment, along with the generalization of these skills with age appropriate peers and classroom expectations. "Our challenge lies in merging our knowledge of effective instructional strategies for students with severe disabilities within the context of a classroom environment that inadvertently may promote a deficit model" (Dymond & Orelove, 2001, p. 115).

Cooper-Duffy, Szedia, and Hyer (2010) promote literacy lessons being taught both in the general education class and in the special education class. They suggest identifying goals that can be worked on during the lesson, selecting specific vocabulary and concepts, adapting using assistive technology, and planning systematic instruction. Using these tools, students with significant cognitive disabilities made significant progress with vocabulary word identification and comprehension (Cooper-Duffy et al., 2010). The article does recognize that there are

challenges when trying to teach reading to students with significant cognitive disabilities within the general education class. How do special education teachers know what type of instructional method to use? The research has shown techniques that work within one-to-one or small group situations. However, the expectation is to teach students within a typical general education classroom. Many of the "key steps for teaching literacy to students with significant cognitive disabilities" (Cooper-Duffy et al., 2010, p. 33) require increased collaboration between general education and special education teachers. Many teachers find it difficult to find planning time, let alone common planning time. There are also limitations based on the specific reading curriculum used by the school. The curriculum outlines what content is taught during each unit, the scope, and the sequence. Cooper-Duffy et al. (2010) provides some examples of the seven key steps with a lesson plan, systematic instruction plan, visuals, and data collection tools. However, these examples do not show how the instruction is accomplished in the general education classroom or how it aligns with the general education curriculum. The article's "preliminary data using this 7-step comprehensive literacy approach show that 6 middle school students with significant cognitive disabilities instructed on a unit of the book *Hoot* made significant progress on both the identification of key vocabulary words and accurately answering comprehension questions" (Cooper-Duffy et al., 2010, p. 39). It was not mentioned whether the content was part of the general education curriculum or if the instruction took place within the general education classroom.

According to Vacca (2007) children with autism encounter barriers when learning how to read. Some of these barriers differ from students without autism who are learning to read. Many students with autism, while included in the general education classroom, are not a part of the reading curriculum. Even though including students with autism in the general education

classroom curriculum can prove to be difficult, students with autism would benefit from stimulation and literacy experiences. The article recognizes that some students with autism may never learn to read due to their functioning level, so there is a focus on higher functioning students. While Vacca (2007) promotes inclusion he does point out that students with autism need to be reached using a method that meets their needs, their interests, concrete or practical materials, and visuals. Dymond and Orelove (2001) pointed out that there have been many articles in the past decade regarding the benefits of inclusion, but the research on how well curriculum content leads to achievement in academic and functional skills have not been addressed.

The Early Literacy Skills Builder curriculum does address what should be taught, but does not answer the question of where it should be taught. It is a curriculum in which the skills taught (like sight words and comprehension) could be aligned with certain general education reading standards; however, it is specialized and would not contain the same content.

This leads to the question how do teachers use (with or without modifications) the general education curriculum, in the general education environment, meet students very specialized needs, and make sure the general education students are still receiving the instruction they need. There is limited information in the area of what should be taught and how to teach students with significant disabilities within the general education classroom curriculum.

Types of literacy instruction. Carnahan, Musti-Rao, and Bailey (2009) completed a study that looked at students' level of engagement in literacy instruction. The participants were students with austim or other significant disabilities that were functioning two to five years below grade level and had communication difficulties. "Individual reading targets included developing sight word vocabulary for meaningful purposes (i.e., following a written schedule or

written directions) and engagement in a variety of literacy experiences. The students spent the majority of their school day in the special education classroom" (Carnahan et al., 2009, p. 41). The literacy instruction used three types of lessons. They were traditional read aloud books (baseline), interactive books, and interactive books with music. Half of the students increased engagement with the interactive books and half of the students decreased engagement. With the interactive books with music, all of the students increased engagement. This study determined that "students with autism and significant learning needs had higher rates of academic engagement during activities that incorporated visual, interactive materials, and music" (Carnahan, et al., 2009, p. 54).

There are not many studies available that research types of instructional strategies for educating students with significant learning needs. One study by Browder, Ahlgrim-Delzell, Spooner, Mims, and Baker (2009) determined that time delay could be an affective way to teach students with developmental disabilities to identify symbols, with most of the research pointing to the strategy working to teach sight words more successfully to students with more moderate cognitive disabilities. The Early Literacy Skills Builder curriculum recommends a constant time delay procedure, with a zero delay when first introduced and then a five second delay during future lessons, to teach sight words. Collins et al. (2007) discussed a modification of the time delay procedure called simultaneous prompting. This type of prompting does not outline a delay in time between the stimuli, response, and prompt. During simultaneous prompting, during the lesson, the student is given a prompt right after the stimulus. However, after the student has completed a few lessons, he or she is given an opportunity before the lesson begins to give a correct response to the stimulus. Both types of prompting methods have shown success with teaching students who have cognitive disabilities. There does not appear to be any definitive

research that shows one type of prompting is better to use over another.

"Shared stories promote early literacy and communication skills for young children" (Browder, Mims, Spooner, Ahlgrim-Delzell, & Lee, 2009, p. 10). This study evaluates students with significant disabilities (all with profound delays and minimal communication abilities) participation in stories. The researchers focused on student independent response through a communication switch, which can be a sign of early reading comprehension. With the shared stories, all three of the participants increased their number of responses and the complexity of their responses. This data would lead the reader to believe that including students with significant disabilities in reading a story increases their engagement in the instruction and that these students can participate in literacy lessons.

One study involved the Early Literacy Skills Builder curriculum. Browder, Ahlgrim-Delzell, Courtade, Gibbs, and Flowers (2008) examined the effectiveness the Early Literacy Skills curriculum compared to instruction using the sight word curriculum published by Edmark (Edmark Corporation, 1972) or sight words relating to the students' needs and preferences. This study used standardized assessments such as the Peabody Picture Vocabulary Test-III (PPVT-III) and the Woodcock Language Proficiency Battery (WLPB). Browder et al. (2008) did not track the number of sight words learned or addressed reading comprehension. The 23 elementary age participants were education in self-contained special education classrooms. The reading instruction was either one-on-one or in a small group setting. Browder et al. (2008) found that the group who received instruction from the Early Literacy Skills Builder curriculum made significant gains on the Early Literacy Skills Assessment, obtaining new skills. These students also made significant progress in the areas of phonemic awareness and nonverbal literacy. The

results of the PPVT-III and the WLPB showed the Early Literacy Skills Builder group made moderate progress, while the control group made extremely small to moderate progress.

The Early Literacy Skills Builder curriculum offers instruction that allows students with significant disabilities who are nonverbal to participate. It includes sight words and reading comprehension; other literacy curriculums only focus on sight words. "Reading is not just word recognition: it includes comprehension of the text" (Cooper-Duffy et al., 2010, p. 32).

Conclusion

Many of the studies conclude that there is not one way to teach students with significant disabilities. Some of the articles focus on inclusion and others state that inclusion is not the answer. There is research for functional curriculum, others for academic curriculum, and yet another that advocates a mix of both functional and academic. Where is the research that looks at where we see these students going, what and how are we going to teach them so that they are able to get there? Many studies are limited and unable to generalize because of the low number of participants involved in the research. It can be difficult to complete research when students with significant disabilities make up a small percent of students and these students have such different, intense needs. A common theme in much of the research is that there is not a lot of research concerning what to teach and how to teach students with the most significant disabilities. Previous research has focused on one aspect of these students education in a more theoretical framework such as the rights of students with significant disabilities or types of prompting methods. There is a lack of research comparing instruction that has been created specific to a students needs and instruction that has been created for a type of students needs.

Chapter 3

Design

This study was a single subject case study. It compared archival data on reading instruction with teacher created materials to current data using the Early Literacy Skills Builder curriculum. Both sets of data were collected during reading instruction for 30 minutes a day, 3 times a week, for 10 weeks. Measures were in place to help ensure internal validity. Even though the researcher delivered all the instruction, all support staff members that worked with student R were trained in the reading instruction. If student R or the researcher were absent, the reading instructional time was made up later in the week. Throughout the study there were extraneous variables that could not be controlled. These were student R's behavior, the behavior of other students in the class, and schedule changes.

Participant

Student R was a nine-year-old, Caucasian, male special education student; identified with autism and a cognitive disability. He was in third grade at an elementary school in Wauwatosa, WI. His parents gave the researcher permission to use student R's data. He was included in small group and one-on-one reading instruction.

Materials and Procedures

Prior to the research study, in spring, 2010, student R started working on receptive sight word identification and reading comprehension using visual answer options. Student R had mastered the prerequisite skill of letter identification and known concepts/vocabulary were used when creating reading comprehension questions. The visuals for the sight words and reading comprehension questions were teacher created using Boardmaker software by Mayer-Johnson. Student R started by matching the sight word to a picture with the word (Appendix A), then

matching the word to the picture, and then receptively identifying the word (i.e. show the student two word cards, teacher asks student to point to target sight word). Each level was considered mastered when the student reached 80% accuracy. For reading comprehension, books were chosen for student R based on the content, receptive vocabulary, reading level, interests, and experiences. Literal comprehension questions were created using the content in the book (Appendix B). Student R answered the comprehension questions by pointing to a picture. The researcher asked the question and then presented two visuals (Appendix C), instructing Student R to point to his answer. The data was gathered using a form (Appendices D and E) one for sight words and one for reading comprehension. The study took place in a special education class that provided one-on-one and small group instruction. Student R started at the beginning, level one, of the Early Literacy Skills Builder curriculum. The materials were the teacher's manual, sight word flashcards, book with story, picture cards used for reading comprehension, and "Moe" the puppet. All materials were kept in a labeled bin on a shelf behind the researcher's desk.

During sight word instruction, student R was asked to receptively identify the word using a constant time delay procedure as outlined by the Early Literacy Skills Builder curriculum (Appendix F). When a sight word was introduced, at first, a zero delay was used. The researcher pointed to the sight word, said the word, and while still pointing to the word, asked student R to point to the word. If he did not immediately point to the word, he was physically prompted by the researcher guiding his hand. Later, a five second delay was used. The researcher asked student R to point to the word, from two word options, giving him five seconds to respond. If he did not respond or pointed to the wrong word, the researcher would model pointing to the correct response and then ask the student to point to the word. The Early Literacy Skills Builder curriculum recommended that if the student made mistakes in the second part of the sight word

instruction to reduce the delay to two seconds, until the student consistently pointed to the correct word. The words and rate the sight words were introduced were outlined within the curriculum. Student R did not have to reach a certain level of mastery before moving on. On the other hand, he did not start learning new words quicker if he had a high accuracy rate.

The reading comprehension instruction consisted of reading a story and asking the student to answer basic literal "wh" questions by selecting a picture card, given two answer options and a five second time delay (Browder et al., 2007). The Early Literacy Skills Builder curriculum teacher's manual provided questions to be asked after reading a specific numbered line of the story and picture cards to use for answers (Appendix G). According to the curriculum's lesson plans, the same story is read at least twice before asking students comprehension questions. If student R did not respond within five seconds, he was given a prompt (i.e. tapping on the correct answer) and then asked the question again. If he still did not respond within the five seconds or if he was about to point to the incorrect answer the researcher physically guided his hand to the correct answer.

The curriculum did not note that a level of mastery should be obtained before the students moved onto the next lesson within a level. The implementation guide suggested the instructor pick a pace of instruction based on the students. However, the sight words and other skills taught within a lesson were repeated throughout the other lessons in the level. The student assessment was given after completing lesson five of the level and it was recommended that a student is 75% accurate before moving onto the next.

Data Collection

Data were kept in a binder of Early Literacy Skills Builder materials. The researcher was able to take data easily during each reading session. The sight word and reading comprehension

data collection forms provided an area in which to write notes to address the presence of any extraneous variables such as dealing with student behavior that disrupted the reading instruction, fire drill, student fatigue, or any other factors.

Correct responses were marked as + and incorrect responses as -. At the end of the lesson, the data for each sight word were turned into a fraction (number correct/number trials) and then a percentage was calculated. The Early Literacy Skills Builder curriculum provided a data form (Appendix H) to be used with each lesson and an assessment form (appendix I) to be used at the end of each level. The researcher created a data form (Appendix J) that was used to take data on each specific sight word. Also, the researcher created a reading comprehension data form (Appendix K) that was used more easily than the data collection form the curriculum provided (appendix L). The form included the date, lesson and objective number, story, line number, and response (+ or -). Instead of question type, the researcher's form included a column for notes. The notes column provided a place to record any extraneous variables and any pertinent information regarding the type of question.

Chapter 4

Results

Student R's archival data taken during teacher-created instruction was compared to data taken during Early Literacy Skills Builder curriculum instruction in the areas of sight word identification and reading comprehension.

Table 1 Sight Word Identification

teacher created instruction (2010)	Early Literacy Skills Builder instruction (2011)
I = 89% accuracy want = 94% accuracy ball = 55% accuracy chips = 89% accuracy juice = 78% accuracy	girl = 61% accuracy boy = 78% accuracy friend = 83% accuracy
3/5 mastered = 60%	1/3 mastered 33%

Table 1 indicates number of sight words mastered out of number of sight words introduced. The sight word was considered mastered with 80% accuracy. The results show that student R mastered more sight words during the teacher created instruction.

Table 2 Reading Comprehension

teacher created instruction (2010)	Early Literacy Skills Builder instruction (2011)
55% accuracy	66% accuracy

Table 2 shows the percentage of reading comprehension questions student R answered correctly. Student R was more accurate with the Early Literacy Skills Builder Curriculum instruction.

The results show that student R increased his sight word and reading comprehension knowledge during both types of instruction. This implies that using a combination of instructional methods could prove to meet the unique needs of our students. Most of the studies recognize that students with significant disabilities require intensive and systematic instruction to learn. That to reach these students, especially individuals with autism, the educator must find an approach that fits their needs while also including their interests to assist in how much they are engaged. Using concrete materials and visuals are common and known to aid instruction. If the educator can look at each student's specific learning needs, experiences, interests, and knowledge and then combine that with available scientifically based research, that would lead to differentiated instruction within the special education curriculum. The method used to educate the student could be as unique as the student.

Chapter 5

Conclusions and Recommendations

To return to the research question does the Early Literacy Skills Builder curriculum teach students with significant disabilities sight words and reading comprehension better than teacher-created instruction? The data indicates that the Early Literacy Skills Builder curriculum taught a student reading comprehension better while teacher-created instruction was better in the area of sight word recognition.

It was found that student R mastered more sight words using the teacher-created materials because the words that were chosen were specific to him based on words that student R was exposed to, his interests, and receptive vocabulary. Many of the words were related to concepts that student R used in his daily communication. The sight words from the Early Literacy Skills Builder curriculum, while relating to fairly concrete concepts, were not words that student R was familiar with. Thus he did not seem motivated to learn the Early Literacy Skills Builder sight words. It is difficult to determine whether the presentation of materials made a difference. However, the Early Literacy Skills Builder sight words were initially presented in isolation, without pairing a picture that represented the word. Pictures that represented the words were introduced later in the instruction. The teacher-created sight word materials were presented from the beginning with pictures that represented the words. For example student R used the Picture Exchange Communication System (Bandy & Frost, 1985) to communicate and was very used to seeing the words “I” and “want” as he used them daily to communicate.

It is possible that student R was more accurate in reading comprehension with the Early Literacy Skills Builder because the stories used scaffolding as a teaching method. The stories followed a common theme with the same characters and concepts are repeated throughout the

stories. These characters and concepts are used throughout the whole curriculum, creating repeated exposure and practice. The Early Literacy Skills Builder stories, using "Moe" the frog as the main character complete with a puppet, promotes student interaction and response. An explanation as to why student R was only slightly more accurate could be that the teacher-created materials were chosen based on the books' content, along with student's receptive vocabulary, reading level, interests, and experiences.

This study focused on two types of reading instruction over a fairly short period of time. Future studies would benefit from increasing the number of participants, conducting research over a greater length of time. It would also be beneficial to study more types of instruction, across different environments. More research in this area would benefit educators who teach students with significant disabilities. Even though such students make up a small percentage of the student population, it is still important to determine how these students learn best. Research can help improve the students' quality of education and provide more opportunities for students to learn.

References

Bandy, A. and Frost, L. (1985). *Picture Exchange Communication System.* Pyramid Educational Consultants, Newark, DE.

Browder, D. M., Ahlgrim-Delzell, L., Courtade, G., Gibbs, S. L., & Flowers, C. (2008). Evaluation of the effectiveness of an early literacy program for students with significant developmental disabilities. *Council for Exceptional Children, 75,* 33-52.

Browder, D. M., Ahlgrim-Delzell, L., Spooner, F., Mims, P. J., & Baker, J. N. (2009) Using time delay to teach literacy to students with severe developmental disabilities. *Exceptional Children, 75,* 343-364.

Browder, D. M., Gibbs, S., Ahlgrim-Delzell, L., Courtade, G., & Lee, A. (2007). *Early literacy skills builder.* Verona, WI: Attainment Company.

Browder, D. M., Mims, P. J., Spooner, F., Ahlgrim-Delzell, L., & Lee, A. (2008). Teaching elementary students with multiple disabilities to participate in shared stories. *Research & Practice for Persons with Severe Disabilities, 33,* 3-12.

Browder, D. M., Wakeman, S. Y., Spooner, F., Ahlgrim-Delzell, L., & Algozzine, B. (2006). Reasearch on reading instruction for individuals with significant cognitive disabilities. *Exceptional Children*.

Carnahan, C., Musti-Rao, S., Bailey, J. (2009). Promoting active engagement in small group learning experiences for students with autism and significant learning needs. *Education and Treatment of Children, 32,* 37-61.

Collins, B., Evans, A., Creech-Galloway, C., Karl, J., & Miller, A. (2007). Comparison of the acquisition and maintenance of teaching functional and core content sight words in

special and general education settings. *Focus on autism and other developmental disabilities, 22,* 220-233.

Cooper-Duffy, K., Szedia, P., & Hyer, G. (2010). Teaching literacy to students with significant cognitive disabilities. *TEACHING Exceptional Children, 42,* 30-39.

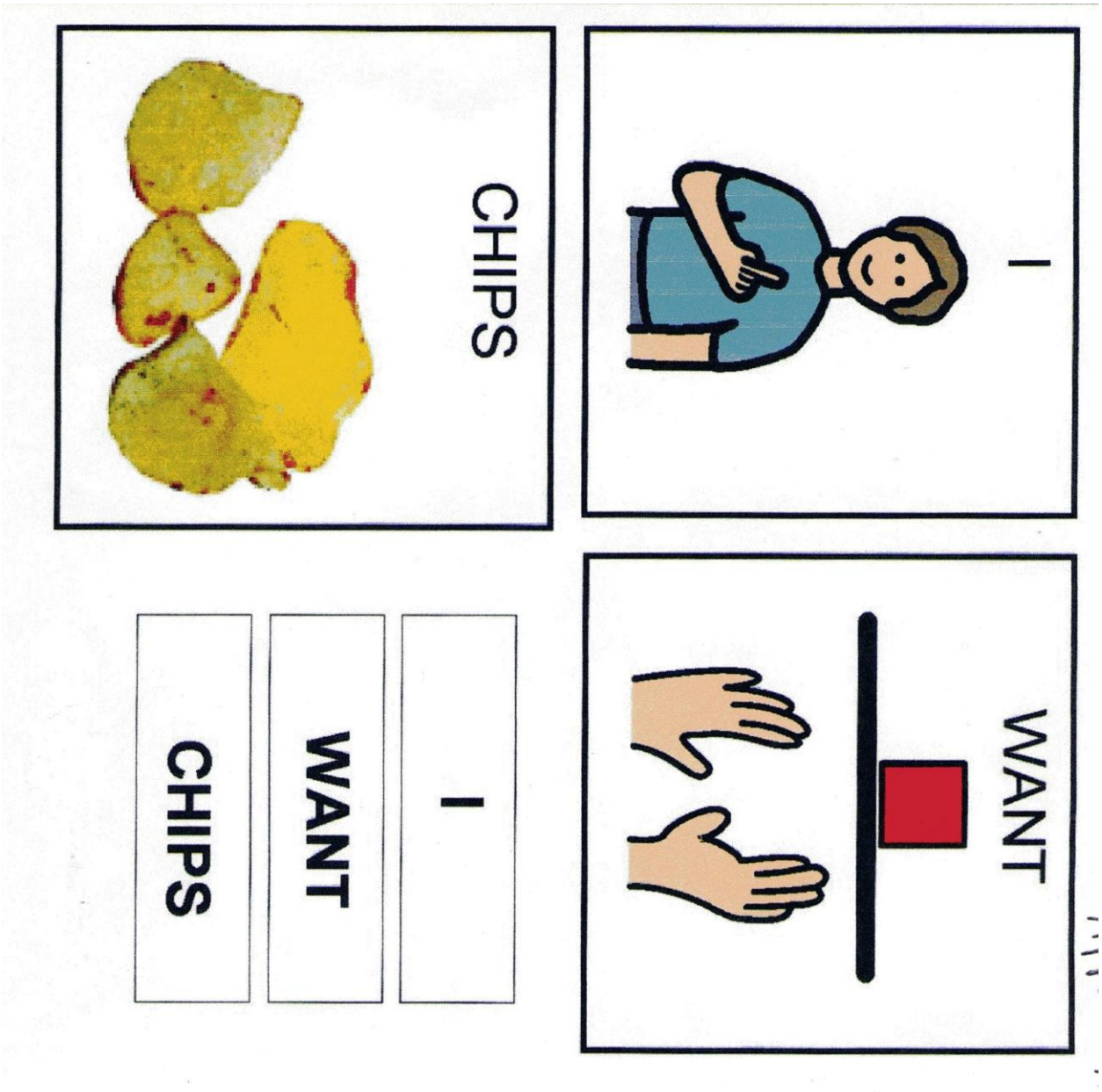
Dymond, S. K., & Orelove, F. P. (2001). What constitutes effective curricula for students with severe disabilities. *EXCEPTIONALITY, 9,* 109-122.

Edmark Corporation. (1972). *The Edmark Reading Program.* Edmark Corporation, Redmond, WA.

Hadadian, A., & Weikle, B. (2004). Literacy, development and disabilities: are we moving in the right direction? *Early Child Development and Care, 174,* 651-666.

Vacca, J. S. (2007). Autistic children can be taught to read. *International Journal of Special Education, 22,* 54-61.

Appendix A

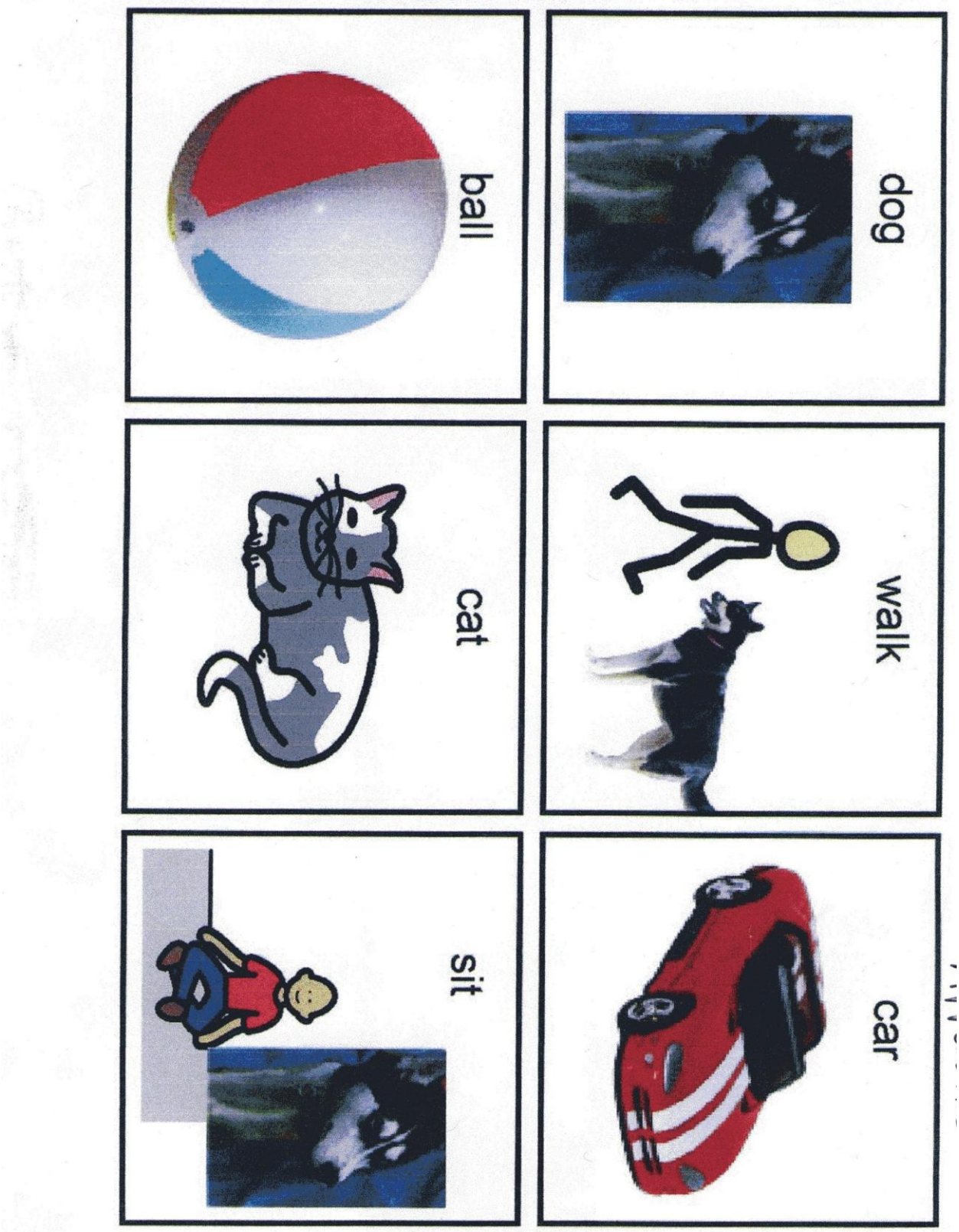


Appendix B

Example Reading Comprehension Questions

Book	Questions	Answer icons
My Dog Willy (extra icons: cat, walk, & sit)	(p.4) Who likes breakfast?	Dog
	(p.8) Where is he?	Car
	(p.12) What is Willy doing?	Ball

Appendix C



Appendix D

Sight words: 1) BOWL, CUP; 2) I, JUICE, BOOK; 3) CHIPS, BALL, WANT

1) match word to picture w/ word; 2) match word to picture; 3) receptive ID of word

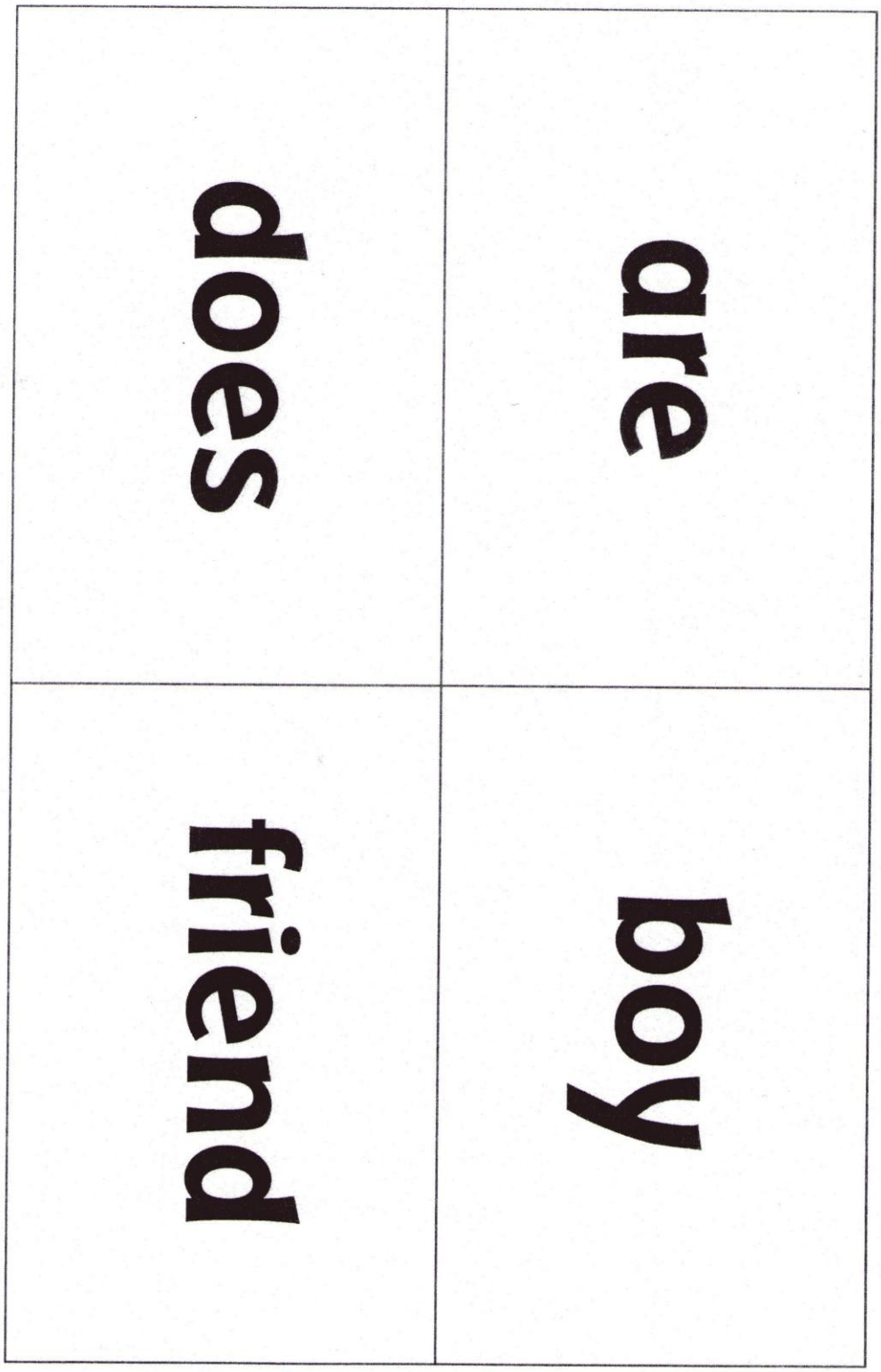
Date	Sight word	Level (1, 2, 3)	# correct/# trials	Notes

Appendix E

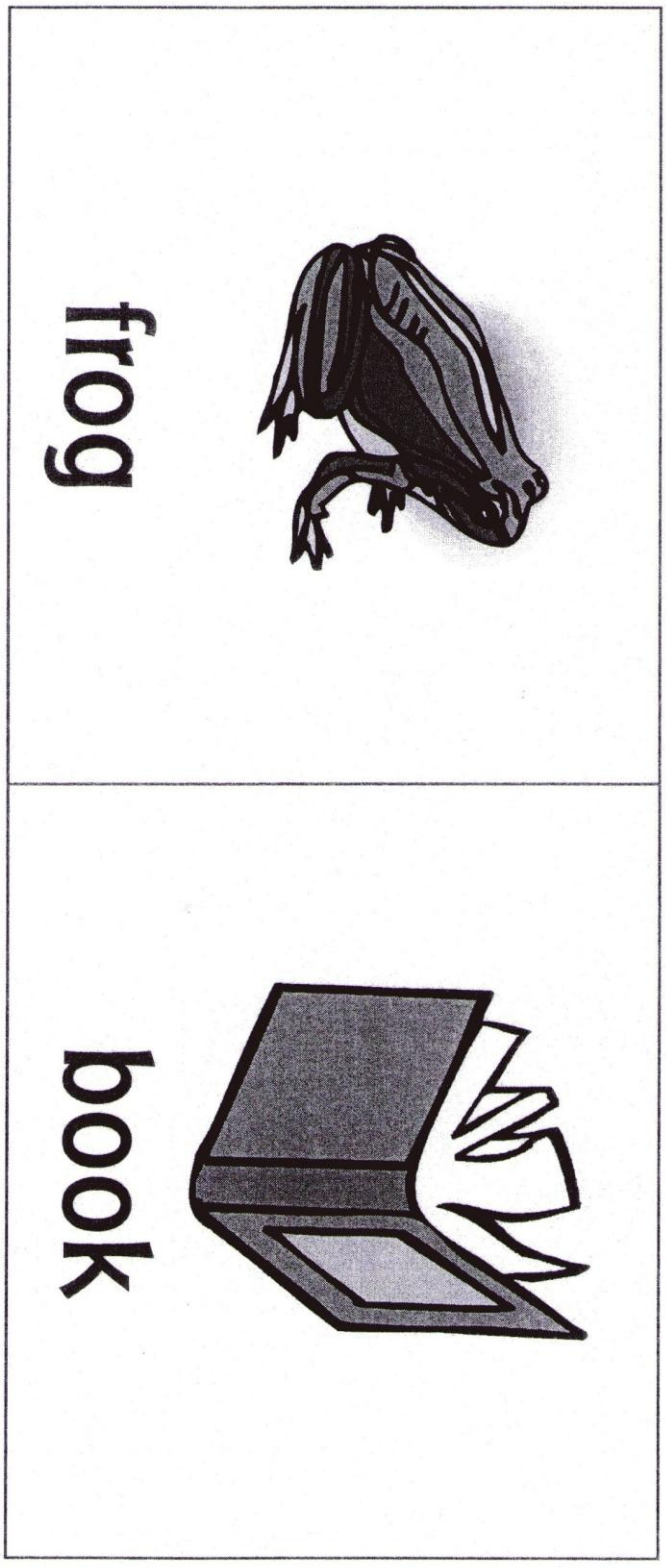
Reading Comprehension: After reading 1-2 sentences of a story, ask question (see comprehension question chart) and have student answer by touching visual. (receptive identification out of a field of 2)

Date	Book	Page #	Question	Correct (+ or -)	Notes

Appendix F



Appendix G



Appendix H

Classroom Summary Form: Level One

Date _____ Examiner _____

Students' Names _____ Mode of Response _____

	Possible # correct per objective	Students' Names				
Objective 1	3					
Objective 2	6					
Objective 3	5					
Objective 4 (no pic)	8					
Objective 4 (with pic)	4					
Objective 5	6					
Objective 8	3					
Objective 13	3					
Total Correct						
Total Possible	38	38	38	38	38	38
Percent Correct						

Appendix I

Student Assessment Recording Form: Level One

Student name _____

School _____

Examiner _____

Student mode of response ☐ points ☐ eye gazes ☐ other

Assessment Summary

Objectives	# of items	Date	Test 1	Test 2	Test 3	Test 4
Objective 1	3					
Objective 2	6					
Objective 3	5					
Objective 4 (without picture representation)	8					
Objective 4 (with picture representation)	4					
Objective 5	6					
Objective 8	3					
Objective 13	3					
		Total Correct				
		Total Possible	38	38	38	38
		Percent Correct				

Assessment Items

Objective 1: Read sight words. Place a check in the appropriate column for each word read correctly and independently. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	Moe				
Item 1	boy				
Item 2	friend				
Item 3	girl				
	Total				

Objective 2: Point to sight words to complete sentences. Place a check in the appropriate column for each word read correctly and independently. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	green				
Item 4	boy				
Item 5	boy				
Item 6	friend				
Item 7	friend				
Item 8	girl				
Item 9	girl				
	Total				

Objective 3: Point to text as it is read. Place a check in the appropriate column for each sentence pointed to completely and independently in a left-to-right, top-to-bottom fashion. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	Molly is a happy frog.				
Item 10	Moe is a green frog.				
Item 11	Moe can jump.				
Item 12	Moe is a green frog. Moe is a boy frog.				
Item 13	Moe can sing. Moe can sing.				
Item 14	I am at school, and I can say, "Ribbit, ribbit, ribbit!"				
	Total				

Objective 4: Say and/or point to a word to complete a repeated story line (without picture representation). Place a check in the S column for each item said verbally (or via AAC device) and another check in the P column if the word is pointed to. Score one point for each item said and one point for each item pointed to. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1		Test 2		Test 3		Test 4	
	Date								
		S	P	S	P	S	P	S	P
Demonstration	Moe is a **green** frog.								
Item 15	Moe is your **friend**.								
Item 16	He can **jump** under a table.								
Item 17	Moe is a boy **frog**.								
Item 18	Moe can **sing**.								
	Subtotal								
	Total								

Objective 4: Say and/or point to a word to complete a repeated story line (with picture representation). Place a check in the appropriate column for each sentence pointed to completely and independently. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	Moe is a **green** frog.				
Item 19	Moe is your **friend**.				
Item 20	He can **jump** under a table.				
Item 21	Moe is a boy **frog**.				
Item 22	Moe can **sing**.				
	Total				

Objective 5: Respond to literal questions about a story. Place a check in the appropriate column for each correct response. Score one point for each check. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Item 23	**"Hello Moe"** What is Moe? (Line 1)				
Item 24	Who is Moe? (Line 3)				
Item 25	What can Moe do? (Line 4)				
Item 26	**"Moe Likes to Sing"** Moe likes boys. Who else does Moe like? (Line 4)				
Item 27	What can Moe do? (Line 6)				
Item 28	What can Moe say? (Line 11)				
	Total				

Objective 8: Identify letter-sound correspondences. Place a check in the appropriate column for each item correct. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	f				
Item 29	m				
Item 30	m				
Item 31	m				
	Total				

Objective 13: Point to pictures/words representing new vocabulary. Place a check in the appropriate column for each item correct. Score one point for each check. The demonstration item is not scored. Add the points and record the total score. Transfer this score to the Assessment Summary.

		Test 1	Test 2	Test 3	Test 4
	Date				
Demonstration	sing				
Item 32	boy				
Item 33	friend				
Item 34	girl				
	Total				

Appendix J

E.L.S.B Sight Words: (see teacher' s manual for directions)

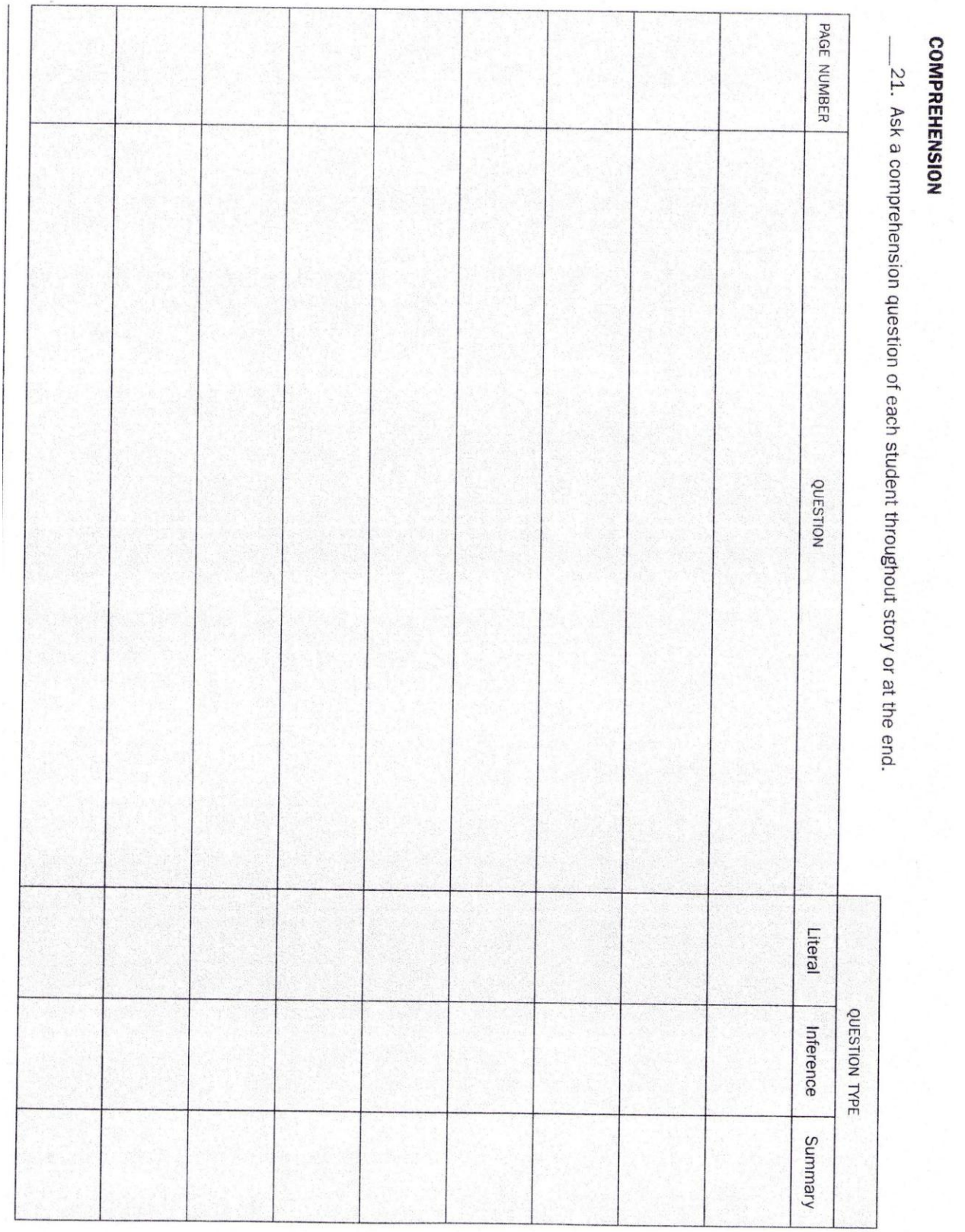
Date	Sight word	Lesson & Obj. #	# correct/# trials	Notes

Appendix K

ELSB Reading Comprehension: (see teacher's manual for directions)

Date	Lesson & Obj. #	Story	line #	Question	Correct (+ or -)	Notes

Appendix L



COMPREHENSION

___21. Ask a comprehension question of each student throughout story or at the end.

PAGE NUMBER	QUESTION	QUESTION TYPE		
		Literal	Inference	Summary